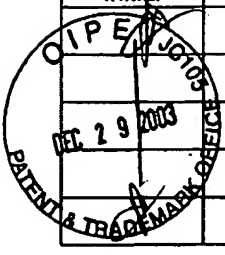


Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 08411-035001	Application No. 10/607,631
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant F. Chris Minion et al.	
		Filing Date June 27, 2003	Group Art Unit 1645

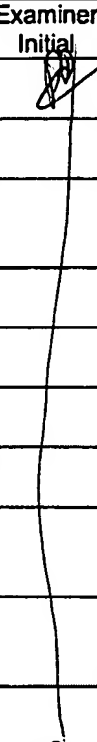

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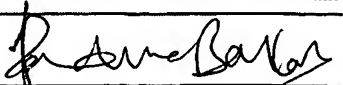
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,580,859	12/3/96	Felgner et al.			
	AB	5,589,466	12/31/96	Felgner et al.			
	AC	5,703,055	12/30/97	Felgner et al.			
	AD	5,836,905	11/17/98	Lemelson et al.			
	AE	6,162,435	12/19/00	Minion et al.			

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Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AF							

### Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AG	Bordier, "Phase Separation of Integral Membrane Proteins in Triton X-114 Solution," <u>J. Biol. Chem.</u> , 1981, 256:1604-1607
	AH	Cordwell et al., "Characterisation of basic proteins from <i>Spiroplasma melliferum</i> using novel immobilised pH gradients," <u>Electrophoresis</u> , 1997, 18:1393-1398
	AI	Djordjevic et al., "Serum and mucosal antibody responses and protection in pigs vaccinated against <i>Mycoplasma hyopneumoniae</i> with vaccines containing a denatured membrane antigen pool and adjuvant," <u>Aust. Vet. J.</u> , 1997, 75:504-511
	AJ	Djordjevic et al., "An improved enzyme linked immunosorbent assay (ELISA) for the detection of porcine serum antibodies against <i>Mycoplasma hyopneumoniae</i> ," <u>Vet. Microbiol.</u> , 1994, 39:261-274
	AK	Dybvig and Yu, "Regulation of a restriction and modification system via DNA inversion in <i>Mycoplasma pulmonis</i> ," <u>Mol. Microbiol.</u> , 1994, 12:547-560
	AL	Friis, "Mycoplasmas Cultivated from the Respiratory Tract of Danish Pigs," <u>Acta Vet. Scand.</u> , 1971, 12:69-79
	AM	Glew et al., "pMGA Phenotypic Variation in <i>Mycoplasma gallisepticum</i> Occurs In Vivo and Is Mediated by Trinucleotide Repeat Length Variation," <u>Infect. Immun.</u> , 2000, 68:6027-6033
	AN	Goborn et al., "Sample Purification and Preparation Technique Based on Nano-scale Reversed-phase Columns for the Sensitive Analysis of Complex Peptide Mixtures by Matrix-assisted Laser Desorption/Ionization Mass Spectrometry," <u>J. Mass Spectrom.</u> , 1999, 34:105-116
	AO	Guerreiro et al., "New <i>Rhizobium leguminosarum</i> Flavonoid-Induced Proteins Revealed by Proteome Analysis of Differentially Displayed Proteins," <u>Mol. Plant Microbe Interact.</u> , 1997, 10:506-516
	AP	Hsu and Minion, "Molecular analysis of the p97 cilium adhesin operon of <i>Mycoplasma hyopneumoniae</i> ," <u>Gene</u> , 1998, 214:13-23
	AQ	Hsu and Minion, "Identification of the Cilium Binding Epitope of the <i>Mycoplasma hyopneumoniae</i> P97 Adhesin," <u>Infect. Immun.</u> , 1998, 66:4762-4766

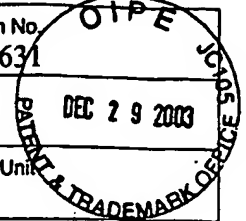
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Examiner Initial	Desig. ID	Document
O I P E DEC 29 2003 PATENT & TRADEMARK OFFICE	AR	Hsu et al., "Cloning and Functional Analysis of the P97 Swine Cilium Adhesin Gene of <i>Mycoplasma hyopneumoniae</i> ," <i>J. Bacteriol.</i> , 1997, 179:1317-1323
	AS	Kim et al., "Identification and Mapping of an Immunogenic Region of <i>Mycoplasma hyopneumoniae</i> p65 Surface Lipoprotein Expressed in <i>Escherichia coli</i> from a cloned Genomic Fragment," <i>Infect. Immun.</i> , 1990, 58:2637-2643
	AT	Laemmli, "Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4," <i>Nature</i> , 1970, 227:680-685
	AU	Liu et al., "GAA Trinucleotide Repeat Region Regulates M9/pMGA Gene Expression in <i>Mycoplasma gallisepticum</i> ," <i>Infect. Immun.</i> , 2000, 68:871-876
	AV	Luo and Lin, "Generation of Moderate Amounts of Polyclonal Antibodies in Mice," <i>BioTechniques</i> , 1997, 23:630, 632
	AW	Lysnyansky et al., "Phenotypic Switching of Variable Surface Lipoproteins in <i>Mycoplasma bovis</i> Involves High-Frequency Chromosomal Rearrangements," <i>J. Bacteriol.</i> , 1996, 178:5395-5401
	AX	Meier et al., "Immunodetection of Biotinylated Lymphocyte-Surface Proteins by Enhanced Chemiluminescence: A Nonradioactive Method for Cell Surface Protein Analysis," <i>Anal. Biochem.</i> , 1992, 204:220-226
	AY	Minion et al., "R1 Region of P97 Mediates Adherence of <i>Mycoplasma hyopneumoniae</i> to Swine Cilia," <i>Infect. Immun.</i> , 2000, 68:3056-3060
	AZ	Noormohammadi et al., "A novel mechanism for control of antigenic variation in the haemagglutinin gene family of <i>Mycoplasma synoviae</i> ," <i>Mol. Microbiol.</i> , 2000, 35:911-923
	AAA	Nouwens et al., "Complementing genomics with proteomics: The membrane subproteome of <i>Pseudomonas aeruginosa</i> PAO1," <i>Electrophoresis</i> , 2000, 21:3797-3809
AD	ABB	Probert et al., "Mapping the Ligand-Binding Region of <i>Borrelia burgdorferi</i> Fibronectin-Binding Protein BBK32," <i>Infect. Immun.</i> , 2001, 69:4129-4133
	ACC	Rabilloud et al., "Modified silver staining for immobilized pH gradients," <i>Electrophoresis</i> , 1992, 13:264-266
	ADD	Rocha et al., "Identification and Characterization of a Novel Fibronectin-Binding Protein on the Surface of Group A Streptococci," <i>Infect. Immun.</i> , 1999, 67:2720-2728
	AEE	Rosengarten and Wise, "Phenotypic Switching in Mycoplasmas: Phase Variation of Diverse Surface Lipoproteins," <i>Science</i> , 1990, 247:315-318
	AFF	Sachse et al., "Epitope Mapping of Immunogenic and Adhesive Structures in Repetitive Domains of <i>Mycoplasma bovis</i> Variable Surface Lipoproteins," <i>Infect. Immun.</i> , 2000, 68:680-687
	AGG	Scarman et al., "Identification of novel species-specific antigens of <i>Mycoplasma hyopneumoniae</i> by preparative SDS-PAGE ELISA profiling," <i>Microbiology</i> , 1997, 143:663-673
	AHH	Schorey et al., "Characterization of the fibronectin-attachment protein of <i>Mycobacterium avium</i> reveals a fibronectin-binding motif conserved among mycobacteria," <i>Mol. Microbiol.</i> , 1996, 21:321-329
	AII	Simecka et al., "Mycoplasma Diseases of Animals," <i>Mycoplasmas: Molecular Biology and Pathogenesis</i> , 1992, Maniloff et al. (eds.), Washington, D.C., American Society for Microbiology, pp. 391-415
	AJJ	Southern, "Detection of Specific Sequences Among DNA Fragments Separated by Gel Electrophoresis," <i>J. Mol. Biol.</i> , 1975, 98:503-517

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Other Documents (include Author, Title, Date, and Place of Publication)		
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	AKK	Stevens and Krause "Localization of the <i>Mycoplasma pneumoniae</i> Cytoadherence-Accessory Proteins HMW1 and HMW4 in the Cytoskeletonlike Triton Shell," <i>J. Bacteriol.</i> , 1991, 173:1041-1050
	ALL	Strasser et al., "Cloning and Expression of a Species-Specific Early Immunogenic 36-Kilodalton Protein of <i>Mycoplasma hyopneumoniae</i> in <i>Escherichia coli</i> ," <i>Infect. Immun.</i> , 1991, 59:1217-1222
	AMM	Talay et al., "Co-operative binding of human fibronectin to SfbI protein triggers streptococcal invasion into respiratory epithelial cells," <i>Cell Microbiol.</i> , 2000, 2:521-535
	ANN	Thacker et al., "Potentiation of PRRSV pneumonia by dual infection with <i>Mycoplasma hyopneumoniae</i> ," <i>The Conference of Research Workers in Animal Diseases</i> , 1997, Ellis (ed.), Iowa State University Press, Ames, IA, #190
	AOO	Theiss and Wise, "Localized Frameshift Mutation Generates Selective, High-Frequency Phase Variation of a Surface Lipoprotein Encoded by a <i>Mycoplasma</i> ABC Transporter Operon," <i>J. Bacteriol.</i> , 1997, 179:4013-4022
	APP	Towbin et al., "Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: Procedure and some applications," <i>Proc. Natl. Acad. Sci. USA</i> , 1979, 76:4350-4354
	AQQ	Wilton et al., "Reiterated repeat region variability in the ciliary adhesin gene of <i>Mycoplasma hyopneumoniae</i> ," <i>Microbiology</i> , 1998, 144:1931-1943
	ARR	Yogev et al., "Increased Structural and Combinatorial Diversity in an Extended Family of Genes Encoding Vlp Surface Proteins of <i>Mycoplasma hyorhinis</i> ," <i>J. Bacteriol.</i> , 1995, 177:5636-5643
	ASS	Young et al., "Isolation and Characterization of High and Low Adherent Clones of <i>Mycoplasma hyopneumoniae</i> ," <i>IOM Letters. 10<sup>th</sup> International Congress of the International Organization for Mycoplasmaology</i> , 1994, Vol. 3, Bordeaux, France, pps. 684-685, #260
	ATT	Zhang et al., "Identification and Characterization of a <i>Mycoplasma hyopneumoniae</i> Adhesin," <i>Infect. Immun.</i> , 1995, 63:1013-1019
	AUU	Zhang and Wise, "Molecular Basis of Size and Antigenic Variation of a <i>Mycoplasma hominis</i> Adhesin Encoded by Divergent <i>vaa</i> Genes," <i>Infect. Immun.</i> , 1996, 64:2737-2744
	AVV	Zhang and Wise, "Localized reversible frameshift mutation in an adhesin gene confers a phase-variable adherence phenotype in mycoplasma," <i>Mol. Microbiol.</i> , 1997, 25:859-869

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Attorney's Docket No.

08411-035001

Application No.

10/607,631

Information Disclosure Statement  
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(37 CFR §1.98(b))

Applicant

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1645

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Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
<i>JS</i>	AA	4,894,332	01/16/90	Schaller et al.	<i>↑</i>	<i>↑</i>	
<i>JS</i>	AB	5,459,048	10/17/95	Kuner et al.	<i>↑</i>	<i>↑</i>	
<i>JS</i>	AC	2002/0068289	06/06/02	Moore et al.	<i>↑</i>	<i>↑</i>	
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## Foreign Patent Documents or Published Foreign Patent Applications

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							Yes	No
	AL	WO 00/31165	06/02/00	PCT				
	AM							
	AN							
	AO							
	AP							

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## Other Documents (include Author, Title, Date, and Place of Publication)

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	AT	

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	AN							
	AO							
	AP							

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